

Criteria of rehabilitation of biotic communities in oil-polluted small rivers (by example of the Shava River, Nizhnii Novgorod oblast)

Mingazova N., Derevenskaya O., Palagushkina O., Nabeeva E., Blatt L.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2014, Pleiades Publishing, Ltd. An assessment of the ecological state of the small Shava River (Kstovskii raion, Nizhnii Novgorod oblast) subjected to oil pollution as a result of a pipeline accident in 2007 is presented. On the basis of physical and chemical characteristics of water quality and the results of a study of hydrobiont communities, the degree of the river pollution has been determined and a conclusion about the rehabilitation of communities as a result of the complex effect of recultivation measures and self-purification processes has been made. Criteria for recultivation activity completion have been defined according to hydrobiological indicators (phytoplankton, zooplankton, and zoobenthos).

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Keywords

criteria of rehabilitation, oil pollution, phytoplankton, rehabilitation of communities, small river, zoobenthos, zooplankton